

CLEAN VERSION OF CLAIM AMENDMENTS

- A1
1. A method for assigning a haplotype for the tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) gene to an individual, which comprises
- isolating from the individual a nucleic acid sample containing at least one copy of the individual's TNFRSF1A gene to identify the phased sequence of nucleotides present at each of polymorphic sites 1 to 18 (PS1-PS18) on that copy of the individual's TNFRSF1A gene,
- comparing the phased sequence to the TNFRSF1A haplotypes represented in Table 5; and
- assigning to the individual a TNFRSF1A haplotype selected from the TNFRSF1A haplotypes represented in Table 5 which is consistent with the phased sequence; and wherein each of the TNFRSF1A haplotypes represented in Table 5 comprises a sequence of polymorphisms at PS1-PS18, wherein the nucleotide positions in SEQ ID NO:1 and alleles of PS1-PS18 are set forth in Table 5.
2. The method of claim 1, wherein the nucleic acid sample contains the second copy of the individual's TNFRSF1A gene to identify the phased sequence of nucleotides present at each of PS1-PS18 on the second copy of the individual's TNFRSF1A gene,
- comparing the phased sequence of the second copy to the TNFRSF1A haplotypes represented in Table 5; and
- assigning to the individual, for the second copy of the individual's TNFRSF1A gene, a TNFRSF1A haplotype selected from the TNFRSF1A haplotypes represented in Table 5 which is consistent with the phased sequence of that second copy.

- A2
20. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:
- (a) a first nucleotide sequence which comprises a tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) isogene encoding a TNFRSF1A polypeptide with a domain capable of binding TNF α , wherein the TNFRSF1A isogene comprises nucleotides 2920-4210, 11417-12926, and 14634-16768 of SEQ ID NO:1 except the sequence is substituted by the combination of nucleotides at polymorphic sites 1 to 18 (PS1-PS18) defined by a TNFRSF1A haplotype selected from the group consisting of TNFRSF1A haplotypes 1-27 shown in Table 5, wherein the nucleotide positions of PS1-PS18 in SEQ ID NO:1 and the alleles at each of PS1-PS18 for each TNFRSF1A haplotype in the group are set forth in Table 5; and
- (b) a second nucleotide sequence which is complementary to the first nucleotide sequence.

A3
24. An isolated fragment of a tumor necrosis factor receptor superfamily, member 1A (TNFRSF1A) isogene, wherein the fragment comprises at least 15 nucleotides in one of the regions of SEQ ID NO:1 selected from nucleotides 2920-4210, 11417-12926, or 14634-16768 and wherein the fragment comprises one or more polymorphisms selected from the group consisting of thymine at PS1, guanine at PS4, adenine at PS12, thymine at PS14, thymine at PS15, adenine at PS17 and adenine at PS18, wherein the nucleotide positions in SEQ ID NO:1 of the polymorphisms are 3102 for PS1, 3603 for PS4, 14824 for PS12, 15089 for PS14, 15093 for PS15, 15932 for PS17 and 16165 for PS18.

25. An isolated polynucleotide comprising a TNFRSF1A coding sequence, wherein the coding sequence comprises SEQ ID NO:2, except for being substituted with an adenine at position 935.